

Yl. Natl. Park

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(Monthly Reports)

April, 1922

143 - (April)
1922

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April

May 10, 1922

Dear Sir:

The following is my report on Yellowstone National Park and the operation of the park for April, 1922.

I returned to the park on April 29th, from an absence since November 8th, except for the period March 15-19, when I stopped enroute from California to Washington, and have since been engaged in making general plans for work for the coming season.

I. GENERAL CONDITIONS:

The weather conditions so far as they effected travel in the park were practically normal. With the exception of the Gardiner and Cooke City roads the snow prevented travel throughout the park. The Gardiner-Mammoth road was open and in good condition during the entire month. The first team over the road between Mammoth and Tower Falls came through on April 23rd but was obliged to leave the road in many places to avoid snow drifts. The Buffalo Keeper and the Ranger at Tower Falls shoveled out the worst drifts and by April 27th it was possible to go through with a team on the road. Rangers in the Upper Park reported good skiing but traveled during the night when the snow was frozen and did not stick.

Regular train service was maintained over the Park Branch of the Northern Pacific to Gardiner, Montana, daily.

Weather

Weather records which were about normal are indicated in detail by the following notes and the enclosed monthly meteorological summary, furnished by the local U. S. Weather Bureau from observations taken at Mammoth Hot Springs.

Temperature: Monthly mean, 33.2° , is 3.8° below normal. The deficiency in temperature was occasioned by the 10-day cold period, 8th to 18th inclusive. The minimum temperature, 4° , occurred on the 17th.

Precipitation: Total, 1.15 inches, is 0.23 inch below normal. The first 17 days were characterized by unsettled weather with light snow or rain occurring almost daily. Following this period was one week of clear, sunny weather, but unsettled conditions set in again near the end of the month.

Snowfall: Total 5.7 inches; normal 8.0 inches. The depth of snow on the ground decreased steadily from 9.3 inches on the 1st to a trace on the 19th. However, butts of drifts remained in places until the close of the month.

Wind: The average hourly velocity was 9.7 miles; normal 8.0. The maximum velocity of 48 miles from the southwest on the 11th is the highest in the April record, the previous highest being 44 in 1913.

Sunshine: Percentage of possible 58; normal 57.

During the spring months frequent and careful observations are made as to the depths of snow on the Upper Park roads, better to determine the probabilities as to the opening of the roads to travel. These measurements were taken by rangers passing from station to station on three different occasions during April, and comparisons were made.

The following table gives interesting data as to these snow depths during the month:

	March 31 <u>1922</u>	<u>1922</u>	April 30 <u>1921</u>	<u>1920</u>
Mammoth	9.5	Trace	0	-
Norris	36	20	12	48
Riverside	20	22	0	26
Gallatin	23	16 (24th)	0	30
Upper Basin	46	32	0	36
Bechler	76	45	-	-
Snake River	64	40	34	-
Thumb	-	-	28	-
Lake	49	31	16	47
Therofare	-	36	-	-
East Entrance	40	18	-	-
Canyon	55	36	22	48
Tower Falls	24	Drifts	0	10
Buffalo Ranch	25	"	0	10
Soda Butte	27	6	0	20
Crevice	48	-	-	-

In 1920 tractor left Mammoth May 12; Norris, May 20; Canyon 24th; Lake, 28th. Roads open to general traffic West Side, May 27th; East Side, May 28th.

Comparison of the snow depths on April 30, 1920, with those of 1922 indicates the probability of the roads being open the latter part of May, but the temperature and other weather conditions during the next two weeks will determine this question more accurately.

Travel

Our records indicate that 48 people visited the park during the month. These all came in via the northern entrance.

Labor and Supply Market

The general scale of wages for various classes of labor was reduced materially beginning April 1st, as shown in the March report and we have found no difficulty in securing all the men required at the new rates. The price of supplies shows a general tendency downward.

II. PERSONNEL:

On April 1st there were 76 on the payroll which had been increased on April 31st to 93.

The following list shows the number of employees of various classes serving during the month, with a general statement of the kind of work in which they were engaged:

<u>No.</u>	<u>Class</u>	<u>Kind of work performed</u>
1	Asst. Engineer	In charge of engineering work in the park.
7	Clerks	1 Disbursing Agent and Purchasing Clerk; 1 on time keeping orders, proposals and vouchers; 3 on duty in Washington office; 2 stenographers on stenographic work, files, etc. (1 of the three on duty in Washington appointed effective Apr. 31; 1, April 22nd.)
1	Park Naturalist	On duty in Eastern cities.
1	Electrician	Operated power plant regular shift, including Sundays.
3	Foreman	1 in charge of Headquarters Corral; 1 repairing sprinkler wagons; 1 on construction.
1	Telegraph Operator	Sent and received all Government Western Union messages; operated one shift on telephone switchboard.
1	Telephone Switchboard Operator	Operated telephone switchboard, daily shifts, including Sunday.
1	Master Mechanic	In charge of shops, and of repairs to heavy road machinery.
1	Blacksmith	General blacksmith work, including shoeing horses in shop, overhauling and repairing tools and equipment.

1	Master Painter	General shop work, including painting equipment and buildings.
1	Chief Lineman	In charge of power plant, telephone lines, and of maintenance crews on telephone lines.
6	Laborers	Teaming, freighting, assisting mechanics and miscellaneous work at headquarters.
1	Handyman	Acting Steward and Master of Transportation.
1	Chief Buffalo Keeper	In charge of tame buffalo herd.
2	Asst. Buffalo Keepers	1 assisting Buffalo Keeper; 1 in charge of hay ranch operations at Slough Creek.
1	Master Plumber	In charge of general plumbing and water and sewer systems.
3	Automobile Mechanics	2 repairing motor trucks and touring cars. 1 on duty at power plant.
1	Carpenter	Repairing buildings at headquarters
1	Chief Park Ranger	In charge of ranger force.
1	Fish & Game Warden	Special observation and reports on wild animals.
1	1st Asst. Chief Park Ranger	In charge of northern district.
2	Asst. Chief Park Rangers	1 on duty at Headquarters & Lake Dist. 1 on duty in Chief Ranger's Office.
20	Park Rangers	Patrolling park borders, protecting game, policing up stations and repairing trails and bridges.
3	Temporary Park Rangers	Do.

In addition to the regular employees listed above under appointment, the following were employed temporarily by the day:

	<u>On April 1st</u>	<u>On April 31st</u>
Mechanics	0	1
Painter	1	0
Cook	0	1
2-Horse Teamster	2	4
4-Horse Teamster	0	1
Laborers	4	10
Skilled Laborers	<u>8</u>	<u>12</u>
	15	29
Appointees	<u>61</u>	<u>65</u>
	76	93

Leaves of Absence

During April, annual leaves of absence were granted as follows:

Alfred C. D. Newman	Laborer	Apr. 1, 1 da.
John Bauman	Park Ranger	Apr. 4-14, 10 da.
Floyd E. Harriott	Laborer	Apr. 5, 1 da.
William Wiggins	Master Plm.	Apr. 1-5, 4 da.
Roy K. Gray	Laborer	Apr. 6-7 (noon), 1½ da.
Lee Webb	Park Ranger	Apr. 11-19, 8 da.
John D. Fraser	Auto. Mech.	Apr. 15-17, 2 da.
John D. Fraser	Auto. Mech.	Apr. 11, 1 da.
August C. Neumann	Master Paint.	Apr. 15, 1 da.
Andrew R. Edwin	Clerk	Apr. 10-15, 5 da.
Helen E. McHutt	Stenog-Typ.	Apr. 18-20, 3 da.
Nathan E. Bander	Tele. Oper.	Apr. 22, 1 da.
Alfred C. D. Newman	Laborer	Apr. 22, 1 da.
James McBride	Fish & Game	
	Varren	Apr. 25-26, 2 da.
Andrew R. Edwin	Clerk	Apr. 27-28 (noon), 1½ da.
Eri A. Allen	Chief Line.	Apr. 25-26, 2 da.
Helen E. McHutt	Stenog-Typ.	Apr. 28, 1 da.
Roy Frazier	Park Ranger	Apr. 29-30, 1 da.
Julia S. Stockett	Stenog-Typ.	Apr. 29-29 (noon), ½ da.
Alfred C. D. Newman	Laborer	Apr. 29, 1 da.
Clarence Boyen	Laborer	Apr. 1-3, 2 da.
Chester A. Lindsley	Asst. Supt.	Apr. 22, 23, 1 da.
Harry McFarland	Foreman	Apr. 7-12, 5 da. <u>N O P</u>

Appointments

Mrs. Lucy Bilkert, Clerk, \$1200 and quarters, plus increase of compensation, effective April 22, 1922.

Mr. Joseph Joffe, Clerk, \$1320 and quarters, plus increase of compensation, effective April 21, 1922.

Mr. Milton P. Skinner, Park Naturalist, back to duty April 1st from leave without pay since October 21, 1922.

III. WORK COMPLETED

(a) Construction of Physical Improvements

A new 12-foot span wooden bridge was built over Cliff Creek on the East road by White's crew. The stringers were made of hewn logs and the deck made of three inch planks.

Some road work was done, clearing fallen rocks from the road, cleaning ditches and opening culverts.

(b) Maintenance and Repair of Physical Improvements

Bridge Repairs: The repairs to the west abutment of the first steel bridge below Mammoth, on which work was begun in March, was completed April 5th. A cofferdam of sacks filled with sand was constructed around the undermined abutment and the space inside pumped out. Our six inch centrifugal pump, operated by a steam roller, was used to keep out the water. Excavation was made along the face of the abutment to about two feet below the river bed. Forms for the concrete were built out about 12 inches from the abutment and the space between filled with concrete. The concrete was poured April 5th. Fourteen cubic yards of gravel and 63 sacks of cement were required.

After the concrete had set the steel shoes of the bridge were cut loose from the concrete and steel plates placed under the shoes to allow the structure to expand to its original position.

North Entrance Road: A log crib near the Chinese Garden was repaired and filled with rock and willows. Directly opposite the Chinese Garden about 100 feet of embankment along the road was riprapped with large rocks and the roadway widened by filling.

About two years ago a boulder 6 feet in diameter rolled down the hill and lodged in the mouth of a concrete culvert near the two-mile post, destroying one wing wall and the head wall of the culvert. The wing wall was repaired and the head walls at each end of the culvert were extended up about 2 feet above the road surface to act as a protection at that point.

Several large boulders were blasted from the river bed to permit the stream to cut a new channel away from the road embankment.

Bridges: Park Rangers built a rough bridge across Hellroaring Creek above the station. This bridge is necessary to cross Hellroaring Creek during high water when to ford it would be dangerous.

The rangers also made a trip to Canyon Station and placed the gauge station in commission, leaving it in care of Winter Keeper Wilson at Canyon Hotel, who has been heretofore instructed in regard to its use. The records at the end of April indicate the river to be about 0.1 ft. higher than last year at the same time.

IV. WORK IN PROGRESS:

(a) Construction of Physical Improvements:

On April 18th, Foreman White transferred to the East Forest Reserve. A crew was organized in Cody of fourteen men, cook, truck driver and three teams, and a camp established at Moss Creek. Work was begun on the six by eight concrete culvert to be built at this place. As the creek was very high at this time from melting snow it was necessary to build a flume to carry the water during the construction period. On April 27th, concrete was poured for the bottom slab of the culvert.

(b) Maintenance and Repair of Physical Improvements:

On April 18th, six men and 2 teams began clearing away the slide just below the steel bridge one and one-half miles from the Gardiner Entrance. This slide moves continually and requires clearing away every spring, although this year there is only about 450 cubic yards of material to move compared with 1300 cubic yards last year. At the end of the month the crew had moved 300 cubic yards. There is also about 100 cubic yards of loose rock and earth which fell from the high cliff near the two mile post to be cleared away.

(c) Miscellaneous Improvement Work:

The Shop Force, in addition to performing their usual duties as noted below, devoted considerable time to the work which has been in progress for several weeks of installing a new steam heating plant in the shops buildings. The boilers were moved from the old barracks building to the new boiler room and set up, and the concrete base for the smoke stack was constructed and concrete ditches were run for the mains.

Painting Department: The Master Painter, with his assistants, were busy most of the month in renovating employees' quarters, and one sprinkler truck was painted during the month. Foreman Ferrell continued his work on sprinkler wagons and by the end of the month this work was practically completed, 16 wagons having been thoroughly repaired and painted.

The Master Plumber made necessary repairs to the water and sewer system and to the fixtures and plumbing in the buildings. A hot water heater was removed from one of the old barracks buildings and installed in the frame building which was assigned to the ranger force at park headquarters.

Headquarters Corral: The work at the headquarters corral consisted of the regular duties about headquarters incident to maintenance of buildings and corrals and general spring clean-up. The foreman also overhauled and mended several sets of harness preparatory to its use during the working season.

Transportation and Storehouse Force: Most of the time of this force was devoted to the sorting of property and taking inventory of supplies and re-arranging and straightening up storehouses.

The Carpenter assisted with the heating plant and built several new cases for use in displaying specimens in the museum. He also made slight repairs and changes in buildings and made some box transfer files for use in the office.

The Blacksmith and his assistant assisted several days on the work in connection with the heating plant; did necessary shoeing of horses; repairs to sprinklers and other heavy equipment; made several sets of lead bars; repaired picks, shovels, axes and other small tools, and made drift pins and drills for use of White's construction crew in the East Forest.

Two mechanics on duty at the Garage devoted most of their time during April to over-hauling the touring cars, the two Waites and two Fords taking most of their attention.

The Telephone System and Power Plant were operated in the usual manner. The Power Plant was run constantly with the results shown in comparison with results for April 1921, as follows:

	<u>1921</u>	<u>1922</u>	
Total current generated, in KW hours	12610	16470	16470
Of this, sold to public utilities @ 5¢ per KW hour	1131	1651	1651
Consumed for street lighting	621	1772	1772
Balance, consumed in Government buildings, for power and lighting, lost on lines in transit	11058	13047	13047
Peak load during month in Kilowatts	44	40	40

Daily reports of operations were submitted.

The Telegraph and Switchboard Office was open daily from 7:30 A.M. to 9:45 P.M., the total business handled being as follows:

Switchboard Calls

On Government local lines	3625
On Hotel Company lines	189
On Long Distance Connections	<u>71</u>
	3885

Telegrams Handled

Government sent	67
Government received	<u>35</u> <u>102</u>

Commercial sent	16	
Commercial received	88	141
Total messages handled during April		3236

Telegrams were handled through the Western Union Office at Helena, Montana; Long Distance called through the office of the Mountain States Telephone and Telegraph Company at Livingston, Montana.

Office Work: The office force was busy with the usual routine work, which includes orders, payment of vouchers, preparation of accounts, reports, general correspondence, etc. 1075 pieces of official mail were received and 749 were sent out during the month.

Park Naturalist Skinner reported to the Washington office on March 30th and was taken up for duty from leave without pay on April 1st. Work throughout April consisted of special work assigned by the Superintendent, visits to natural history museums at Washington, New York, Syracuse, Buffalo, Chicago, and Cheyenne to get the latest ideas on exhibition methods and to secure labels, and driving his private car from New York to Yellowstone Park so as to visit various places at request of the Superintendent and to observe road and travel conditions. March 31st - conferences with various parties at Biological Survey and U.S.N.M. April 1st - at National Museum, to Biological Society in the evening. April 2 - at Washington Zoological Park. April 3 - conference with Fisheries officials in the morning, at Zoological Park in afternoon. April 4 - Conferences with Biological Survey and Chas. Sheldon. April 5th - official correspondence, paragraphs for ranger manual, editing publications. April 6th - Conferences at U.S.N.M. in morning, afternoon at Museum. April 7th - Conferences at Biological Survey and official correspondence. April 8th - to New York. April 9 - Bronx Zoological Park. April 10 - Conferences with Edmund Seymour and Dr. Grinnell, called at Palisades Park office, informal talks at Polytechnic Institute. April 11 - at American Museum. April 12 - at Bronx Zoological Park and Aquarium. April 13 - conference at American Museum with officials, called on Dr. Hornaday. April 14 - by train to Jamestown, getting car ready. April 15 to 16 trip to Buffalo to call on Hamlin and see museum, and Syracuse to confer with

Dr. Adams, Whitney, Francis, Cline, and Dean Moon. April 19-22, drove to Chicago via Jamestown to Erie, Cleveland, Toledo, South Bend. Roads all paved and good except detours which were soft and very muddy. April 23 - at Field Museum. April 24 - Conferences with Abercrombie, Cowles, Fuller, Coulter, Chamberlain, Salisbury, and Thorne on official matters. April 25 - Repaired and oiled car, conference with Mr. Bray, at Field Museum. April 26 - at Field Museum. April 27 - May 2, driving car from Chicago via Clinton, Cedar Rapids, Marshalltown, Omaha, Lincoln, Grand Island, North Platte, Sidney, to Cheyenne. Roads paved with concrete and brick to a point twenty miles west of Clinton, then a few hundred miles of gravel and the balance gravel. Roads generally good except in Iowa where construction going on and a hundred miles of soft, muddy roads between Grand Island and North Platte. Everywhere he found evidence of improving roads with continuous pavement the end to be reached eventually. Even before reaching Chicago he observed many tourists and camp outfits on the road. Later they increased and he began to receive many questions about Yellowstone Park and the routes thereto. May 3- Conferences at Cheyenne with Chas. S. Hill and George B. Morgan's secretary and visit to Museum. May 4-6 drove to Mammoth via Casper, Shoshoni, Thermopolis, Graybull, Cody, Powell, Bridger, Laurel and Livingston. Roads good gravel and dirt to Shoshoni; dirt, ratty, and muddy across the mountains to Thermopolis, although passable; good gravel and dirt to a point twelve miles west of Graybull, then narrow dirt roads in fair condition to Cody; good gravel to Powell; rather poor dirt roads to Bridger and then good gravel to Laurel; good gravel and dirt to Livingston; fair gravel and dirt roads to Mammoth, but rough for short stretches. At points throughout from Cheyenne construction going on in spots. Tourists and camp outfits became very numerous, and hotel managers and garage men report tourist travel starting very early and a great many inquiries about Yellowstone Park and how soon they could get into it.

Office work in the Assistant Engineer's office for the month consisted of keeping the map blueprint files up to date, answering correspondence, designating the crews for the different camps and making general plans for the season.

A design for a six by eight concrete culvert for Moss Creek in the Shoshone Forest Reserve was finished and blue prints made.

Ranger Force

Chief Ranger Woodring made patrols to Gardiner, Tower Falls and the Lower Yellowstone Valley.

First Assistant Chief Ranger Trishman made patrols to the Buffalo Ranch, Hellroaring, Tower Falls and Gardiner, building the bridge at Hellroaring (previously mentioned) and repairing about six miles of trail in the Hellroaring country.

Assistant Chief Ranger Douglas returned to duty to his district from headquarters on April 5th, and made patrols from Mammoth to Lake; Lake to Beehler Station, and return; and to Upper Yellowstone and return.

Assistant Chief Ranger Scoyen was on duty in the Chief Ranger's office throughout the month except for several days when he made a patrol to the Canyon to start the water gauge on the Yellowstone River.

Game and Fish Warden McBride made patrols to Car-bella and other points in the Yellowstone Valley; to Hell-roaring, Tower Falls and Crevice.

One ranger was stationed at Crevice during the month and made local patrols to the game ranges in that vicinity, both inside and outside of the park.

The men on station at Gardiner made patrols in their district and did some general cleaning up about the station.

The regular patrols were made at Gallatin and River-side stations in their respective districts.

The ranger on Tower Falls Station was engaged in feeding the horses to include the 27th, and also made patrols in his district and to headquarters and Hellroaring.

From Soda Butte Station regular patrols were made on Soda Butte Creek and up the Lamar Valley.

Regular patrols were made from Sylvan Pass, East Entrance Station, two of them as far as Sylvan Pass to measure snow and to fix the telephone line - one of those extending as far as Cub Creek. In both instances the telephone line was found broken-in the Pass by snow slides.

Regular patrols were made from Upper Yellowstone Station, special attention being given to the patrolling of small streams to observe the conditions of the moose.

The patrols from Snake River Station included one special trip to Bechler in the Southwest corner.

The men at Lake Station made the regular patrols in their district and visited headquarters once, bringing in their reports.

Regular patrols were made from Bechler Station within the district.

Conditions for traveling on skis were excellent during the month although it was necessary to travel at night when the snow was frozen.

In addition to the patrol work mentioned above members of the ranger force built the bridge on Hellroaring as previously mentioned; placed the water gauge at the Canyon in commission; fed the horse herd at Yanceys and one ranger, Anderson, devoted practically the whole month to hunting carnivorous animals.

The men at headquarters were assigned new living quarters and assisted the plumber, painter and carpenter in putting them in thorough repair, which included the installation of a hot water heater and repainting and renovating throughout the interior.

The Buffalo Keeper and his assistant fed hay to the herd at the ranch on the Lamar River to include the 24th, and did some general policing up incident to spring.

Improvements by Park Utilition

The Yellowstone Park Camps Company had a crew of several men at work at Mammoth, building new tent houses under the plans approved by the Service. The Yellowstone Park Transportation Company increased its force at Mammoth, adding several mechanics, who are engaged in over-hauling their motor transportation preparatory to the opening of the season. The Hotel Company had no employees in the park except the winter keepers at the various hotels and the two Chinamen who were engaged in developing the garden on the Mammoth-Gardiner road, where vegetables are raised for use in the hotels.

Mr. C. A. Hamilton arrived in the park April 19, and is making plans for continuing his improvement work at the Lake.

VI. PLANS OR PROPOSED WORK:

The crew now working in the Gardiner Canyon clearing away slides will finish that work, then move to Mammoth and make repairs to the cave-in in front of the Mammoth Hotel.

White's crew now working in the Shoshone Forest Reserve will finish the six by eight concrete culvert at Moss Creek, build a twelve foot concrete bridge at Pagoda Creek, construct several log diversion cribs along the Shoshone River and make general repairs to the road surface.

As the snow still lays heavy on the Park roads it is not likely any road crew will be started out before the first of June. A small crew under Foreman Ferrell will begin work about May 20th, making repairs to the sprinkling system supply tanks between the Gardiner entrance and Golden Gate.

At park headquarters much work will be done in May in connection with the development of lawns, digging out ditches, irrigation, etc. The shop force will continue the work of over-hauling motor vehicles, equipment and tools, repairs to buildings, painting motor transportation and renovating quarters, etc.

In addition to the regular patrol work the ranger force will continue the warfare on wolves and coyotes, intensive patrols for the purpose of watching roads to prevent washouts and damage to bridges, begin trail construction and do general policing up around stations.

As soon as snow conditions will permit a road about half a mile long will be constructed from the Cooke City road to Fish Lake, near Soda Butte, to give access to the new building constructed last fall for use of the fish hatchery in collecting spawn at that point.

Much of the work of construction of the proposed new checking station at Cooke City entrance, under plans approved April 8, 1922, will be done by rangers if the snow leaves in time so the work can be done before the opening of the season.

VII. POLICIES:

No changes to note for April.

VIII. COST OF OPERATION:

The total expenditures during the month as shown by the monthly report amounted to \$8701.46.

The monthly Report of Cost of Work, showing costs in detail, will be transmitted as soon as completed.

IX. OTHER MATTERS OF INTEREST:

Wild Animals

General Conditions: The rapid melting of snow during the past month has bared the lower valleys and high ridges of snow. Excellent grazing is now available for all park animals, and they are in good condition. They have recovered rapidly from the effects of the severe winter just past. There should be an excellent crop of young stock this spring, as all animals will be in excellent shape by calving time.

Antelope: On April 15th the Chief Ranger and three of his men made a special effort to round up and observe the antelope on their range near the North line. A total of 218 were counted, which was 30 more than were accounted for last month, indicating that the loss is not as heavy as was feared. The loss of the past winter, however, is still sufficient to indicate that complete extermination is possible and that there is great need of special effort being made for their protection. At the present time these animals are drifting towards their summer ranges and have been observed at Hellroaring, and eleven were seen in the vicinity of the Slough Creek mail box.

Bears: The first bear was seen on April 3rd between Mammoth and Black Tail. Since that time several others have been seen and noted in various parts of the park.

Buffalo, Tame Herd: The main herd of buffalo was turned out on the 24th, and the calves on the 30th. Feeding was discontinued on the latter date. 75 tons of hay were fed during the month, and a total of 596 tons for the winter. 18 calves were born to the main herd the past month and several more were also noticed in a small band now ranging on Hellroaring.

Buffalo, Wild Herds Weather conditions which made it practically impossible to travel during the day made the proposed count of the wild herd out of question. Thirteen heads were found in the Pelican Creek country. Wilm found 56 in the Lamar country and this makes a total seen during the winter of 69. There is a herd of over 50 ranging on Cache Creek, but these are not considered as there seems to be some doubt as to whether or not they are the same ones that Wilm saw earlier in the winter. It is the opinion of the majority of the men informed on this matter that this is an entirely different herd. If this is the case, our wild herd contains well over 100 head of buffalo. One dead one was found during the winter.

Deer Deer are apparently increasing greatly in all parts of the park. Unusually large numbers have been noted in the Northern District during the past month. The pets around headquarters have stopped begging around back doors to a great extent and many have left entirely. About 18 deer wintered among the buildings at headquarters. Only one White-tailed deer was seen in the vicinity of headquarters during the winter.

Elk Elk are in splendid shape in most sections of the park. The severe weather during January, February and the first half of March has left its mark on the herds, and there are still weak elk to be seen. One cow died near the one mile post on the Gardiner road, and one was killed by a Transportation Company car, but this is all the dead that have been reported this month. In the case of the elk killed by the car, evidence proves conclusively that it was not the fault of the driver. Scoyen reports several elk in a very weakened condition near the four mile post from Norris, and some of these will undoubtedly die before spring. About 20 other elk in the vicinity of Norris were in excellent condition, and have evidently wintered well in the various warm basins at and around Norris.

Care and Fish Warden McBride reports a total of 325 elk on the outside of the park boundaries, and east of the Yellowstone River. Forest Rangers report 15 head on Eligrant Peak.

The spring drift to the summer ranges inside the park is now in full swing. Elk in the vicinity of Hellsrearing have increased from 400 to 1500 during the month. Elk are scatter-

ed thickly along the Yellowstone River watershed from Cache Creek north to the park line. They are not banding to any extent, and no exceptionally large herds have been seen during the month. Under these conditions it is rather difficult to get even an estimate of the number in the various sections of the park. Elk in the Gallatin herd show no effects whatever of the winter, and are in splendid condition.

Most of the suffering among the elk at present is due to wood ticks. This pest is particularly active during the spring months.

The drift of the northern herd into the park should be completed by June first, and all members of this herd should be in the park by this time.

Moose: Therefore station is the only one reporting moose during the month. A total of 14 were seen in this district. None of these were bulls. One cow moose died near Cabin Creek in March.

Mountain Sheep: Mountain sheep are evidently thriving in the park. They have been seen in many parts of the northern district. There is also one small band on Mountain Ash Creek in the Bechler River District. They have been seen during the past month on Mt. Everts, Hellroaring, Yellowstone Bridge at Tower Falls, Junction Butte, Specimen Ridge and Mt. Morris.

Predatory Animals: Only one coyote was reported killed by rangers during the past month. Park Ranger Anderson cleaned up a den of 1 female and 10 wolf pups. He is still operating in the country where wolves are known to den and he will probably get several more dens during the spring. To date there has been a total of about 175 coyotes and 13 wolves accounted for during the winter. It is not possible to get the exact number of coyotes as many were known to have taken poison and their carcasses were never found. Anderson was sick during the time that coyotes were taking the poison readily and was not able to trace them down.

Feeding of Hay

Feeding of game in all parts of the park was discontinued during the month, and about three weeks to a month later than last year. Feeding stopped at Yancey's on the 27th and at the Buffalo Ranch on the 30th. The main herd of buffalo was turned out on the 24th and the calves on the 30th.

A total of 75 tons were fed at the Buffalo Ranch in April as compared to 125 in March. A total of 586 tons were fed during the entire winter.

At Yancey's about 15 tons were fed. There is about 20 tons of hay left at Yanceys, which makes a total fed there of 130 tons for the winter. This should be divided in the ratio of about one third to elk and two thirds to Park Service horses.

Miscellaneous

Fish: A little fishing was done by residents at lower altitudes

Botanical: Dandelions began blooming at Mammoth about May 1st. At this date the Iris plants are about three inches high; leaves are well formed on the gooseberry bushes and wild strawberry plants; grass growth has got nicely started; buttercups are abundant; dandelions, blue violets, and yellow violets are common; barberries and spring beauties are just beginning to bloom; "pussies" are well formed as are the willows and aspens.

Birds: It is reported that robins and bluebirds arrived on March 26th and the meadow larks at the same time, all are common now. Bluebirds are nesting and the robins "looking around"; ospreys are ready to brood in Gardiner Canyon; nutcrackers have young almost ready to leave their nests; junco and Cassin purple finches are common; killdeer are nesting; blackbirds, both red wing and Brewer are common; song sparrows are nesting and Wright fly-catchers have arrived; red-tail hawks are common.

Animals: Ground squirrels and woodchucks are abundant. Insects of various kinds are common. Jack rabbits have turned gray during the month.

Accidents

On April 19th, Mr. George Webb, an assistant carpenter, was injured while working on the band saw in the shops. This accident was not serious and was reported on the regular forms to the Compensation Commission.

Sickness and Medical Service

Dr. W. E. Crawback furnished medicine and medical attention to park employees under his contract up to the 23rd, when he was obliged to go to the hospital at Chico Hot Springs where he underwent an operation for appendicitis. He is now convalescent and will be back on the job in a few days. The report of service rendered cannot be given at this time as Dr. Crawback's records are not available during his absence.

Natural Phenomena

At Mammoth Hot Springs, the Blue Spring that supplies Jupiter Terrace remains the same as last year, while the spring to the south is building up its formation and its coloration is increasing and spreading. Marble Terrace that showed trifling activity last year is dead. The only considerable change this year is at Angel Terrace, where, of the four openings active last year, the two higher openings are dead and the most southern and principal opening last year is dying, the smallest and least active opening of last year is now much more active, a new and now the most active opening has formed just north of the old southern opening. The total activity seems about the same as last year but owing to more favorable exposure, the tourists will see more beauty this year. White Elephant remains the same as at the close of the 1931 season. The color is good at Orange Spring, activity remains the same as last year except that a small opening of pencil diameter has opened on top and now throws a steady stream of hot water surcharged with carbonic acid to a height of 15 inches, thus more nearly approaching its condition of twenty years ago; the small cone remains as last year. Harrow Gauge Terrace has little activity. At Cleopatra Terrace, the color and activity are a little better than last year. Mound Terrace remains as fine as ever. At Minerva Terrace the color and activity is increasing, and some very fine stalactitic growth is forming. Palette Spring is dead. The small, imperfect spring above Cupid's Cave is dying. Hymen Terrace is decreasing in activity.

The change at Angel Terrace was probably caused by increased internal pressure opening a new crack in the comparatively weak formation.

Total activity remains pretty much as last year, but the wonder and beauty of the formation can be more easily seen than ever.

Stygian Cave, Pedolph Spring, Bath Lake and Devil's Kitchen remain normal.

Special Visitors

Messrs. Howard H. Hays and E. C. Moorman of the Yellowstone Park Camps Company visited headquarters April 17-19.

Mr. Wm. M. Nichols, of the Yellowstone Park Hotel Company, visited the park April 12-13.

Mr. George Whittaker returned from an absence of several weeks on April 25th.

A total of 48 people entered the park by the Gardiner entrance. This does not include persons entering the park to work for the various departments.

One of the features of the month's travel was the ski trip to the Upper Basin by Mr. Carl Soyland and Frantz Johansen of Norway. Mr. Soyland is a Norwegian newspaper writer and is making a trip around the world. He writes travel letters for some of the largest newspapers in Norway as well as some of the larger Norwegian papers in this country. He was tremendously impressed with the park, and will make his winter trip the subject of feature articles in the papers mentioned. The park will receive a great deal of publicity through Mr. Soyland's visit, both in this country and abroad. They were given every assistance in making their trip a complete success.

Mr. Johansen is a Norwegian sailor and was born and raised above the Arctic Circle. He gave an exhibition of his exceptional use of skis while here.

Both these men were thoroughly familiar with conditions of winter travel and it was not necessary to send a ranger escort.

Motion Pictures

No motion picture permits were issued, or were any operators present in the park during the month.

Miscellaneous

Death of Howard Eaton: On the morning of April 6th word was received of the death of Mr. Howard Eaton of Wolf, Wyoming, following an operation for appendicitis at Sheridan, Wyoming. In view of Mr. Eaton's long and devoted connection

to the Yellowstone Park authority was given by the Director of National Parks, under date of April 6th, to display the flag at all park stations at half mast for a period of ten days, April 7-16th, inclusive.

Mr. Eaton has been known for many years throughout the United States as a guide for special tourist parties through Yellowstone and other National Parks, and through Mexico and Arizona. His home was at Wolf, Wyoming, where, with two brothers, he owned and operated one of the most famous and well-known dude ranches in the United States. His character and standing are indicated in the following quotation from an article written by Mr. Howard Hays, one of his closest friends:

"Howard Eaton was one of the most widely known and best loved men in the western United States. I knew him over a period of 17 years. The similarity of our interests threw us in contact not only in the Yellowstone but in Chicago, Washington and many other places.

"He was always the same - friendly, fearless and energetic. As a raconteur he surpassed anybody I have ever heard. He told tales of the old frontier with word sketches that rivaled the pen sketches of Charles Russell.

"I have heard him tell a crowd of eastern men the story of the Custer massacre with such picturesque and vivid narrative that his auditors looked upon him as a sort of super-man.

"With relation to Yellowstone park he occupied an unique position, not even approached by any other outfitter and guide.

"In spite of his skill as a hunter, explorer, rancher and guide Howard Eaton will be remembered most for his qualities of heart and soul. I never met his superior for manliness and real worth. Peace to his spirit."

In his death, Yellowstone Park lost one of its best friends.

School: Enclosed is a copy of the monthly report of attendance at the school maintained at park headquarters for the benefit of employees' children, by Mrs. Marriott.

Entertainments: Picture shows were held as usual every Saturday night under the direction of the Amusement Club at park headquarters.

Religious Services: Church services were held in the Chapel as follows:

Mr. W. Friend Day, layman of the Episcopal Church held services on the mornings of April 3rd and 15th, and on the evening of the 30th. Rev. J. H. Groth, English Lutheran Minister of Livingston, held evening services on the 23rd. Mr. Groth was accompanied by the choir from his church in Livingston, Montana.

Circulars: No office circulars were issued during the month.

IX. RECEIPTS AND REMITTANCES:

Enclosed is the monthly report of revenues due and collected and transmitted during April on the usual blank forms. The total amount collected as shown by the report is described as follows:

Postal Money Order No. 48800, dated May 1, 1922, drawn by the Postmaster at Yellowstone Park, Wyoming, on the Postmaster at Washington, D. C., amount	\$ 1.25
Certified Check #3154, dated April 7, 1922, drawn by Anna R. Fryer, on Yegon Bros., Bankers, Gardiner, Montana, to the Director, National Park Service, amount	50.00
	<u>\$51.25</u>

Acknowledgment of the receipt of the enclosed money is requested.

Cordially yours,

Horace M. Albright,
Superintendent.

The Director,
National Park Service,
Department of the Interior,
Washington, D. C.

Enclosures.

CAL:JES

DEPARTMENT OF THE INTERIOR.
YELLOWSTONE NATIONAL PARK.

CHIEF RANGER'S MONTHLY TRAVEL REPORT, MONTH OF

April

1922
1915

	GARDINER.		YELLOWSTONE.		SNAKE RIVER.		SYLVAN PASS.		SODA BUTTE.		SUMMARY.	
	Cars.	People.	Cars.	People.	Cars.	People.	Cars.	People.	Cars.	People.	Cars.	People.
Permits issued.....												
Permits issued (complimentary).....												
Cars entering second time.....												
Total.....												
Passengers in horse-drawn vehicles.....												
Passengers on horseback.....												
Passengers on bicycles.....												
Passengers on foot.....												
Total incoming passengers with private transportation.....		48										
WITH HIRED TRANSPORTATION.												
Yellowstone Park Transportation Co.....												
Licenses of personally conducted camping parties.....												
Livery licenses, short trips.....												
Total incoming passengers with hired transportation.....												
TOTAL INCOMING PASSENGERS.....											48	

Total automobiles in public camps.....

See T.M. ...

DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE
YELLOWSTONE NATIONAL PARK
YELLOWSTONE PARK, WYO.

CE OF THE SUPERINTENDENT

May 4, 1922.

Mr. Horace M. Albright.
Supt. Yellowstone National Park,
Yellowstone Park, Wyo.

Dear Mr. Albright:

The following is my report on the activities of the
ranger force for the month of April 1922.

General Conditions.

Conditions throughout the park are practically
a month later than was the case in 1921. The March report
for last year covers about the same ground as this, the April,
report for 1922. Snow conditions are 15 to 20 days later
than last year, and work completed by rangers during the
past April is very similar to that of March 1921.

There was one 10 day cold period, and the temperature
for the month averaged 3.8° below normal. Snow did not start
to thaw extensively until the 19th, but the amount has
decreased very rapidly since that time. At places there has
been a decrease of over 30 inches, but the average over the
entire park is about 18 inches. It is reported that the
snow settled 18 inches at Cooke City in two days. This not
only shows that the snow is settling very rapidly, but that
it is very light and not of high water content.

Personnel:

There were no changes in the personnel of the force
during the month.

Assistant Chief Ranger Douglas recovered from his
injury and was able to return to duty in his district on the
6th.

Wesley
Full

Leave was granted the following members of the force during the past month.

Bauman	10 days
Webb	8 "
McBride	3 "
Frazer	1 "

Patrol Work:

Patrols were made under excellent conditions during the month, although it was necessary to travel at night the greater part of the month.

Chief Ranger Woodring. Patrols to Gardiner, Tower falls and the Lower Yellowstone Valley. Worked on new ranger quarters.

Game and Fish Warden McBride. Patrols in the vicinity of Carbella and points in the Lower Yellowstone Valley. Hellroaring, Tower Falls and Crevice.

Assistant Chief Ranger Scoyen. On duty in the Chief Ranger's Office. Made patrol to the Canyon to start water gage on the Yellowstone River. Helped prepare new ranger quarters.

Northern Supervisory Territory:

1st Assistant Chief Ranger Trischman. Patrols to Buffalo ranch, Hellroaring, Tower Falls and Gardiner. Assisted with preparation of ranger quarters. Built bridge at Hellroaring and repaired 6 miles of trail near Hellroaring.

Crevice Station.

Finch
Park Ranger ^{Finch} alone on station during month. Made local patrols to game ranges inside and outside park. Bauman attached to headquarters. Helped build bridge and repair trail near Hellroaring. Local patrols near Gardiner and Mammoth.

Gardiner Station:

Local patrols in district for purpose of observing the game. Policing up and improving the station and grounds. Helped count antelope.

#3

Gallatin Station.

Regular patrols over district. ~~Patrol by Carter to Mammoth.~~

Riverside Station.

Regular patrols. Webb on leave 10 days. No patrol to South Riverside. Sawing Wood.

Tower Falls Station.

Feeding horses until 27th. Patrols to Mammoth and Hellroaring.

Soda Butte Station.

Regular Patrols. Park line at Soda Butte Creek. Upper Lamar Valley.

Southern Supervisory Territory.

Assistant Chief Ranger Douglas. Made patrols Mammoth to Lake. Lake to Bechler River and return. Upper Yellowstone and return.

Sylvan Pass Station.

Regular patrols. Two patrols to Sylvan Pass to fix telephone line and measure snow. One patrol extended to Cub Creek. Telephone line broken by slides in pass both times.

Upper Yellowstone Station.

Regular patrols. Special patrols to head of small creeks to look for moose.

Snake River Station.

Regular patrols. Special trip to Bechler River.

Lake Station.

Regular patrols. To Mammoth with reports.

Patrol Work: (cont.)

Bechler River Station.

Regular Patrols.

Game Conditions:

The rapid melting of snow during the past month has bared the lower valleys and high ridges of snow. Excellent grazing is now available for all park animals, and they are in good condition. They have recovered rapidly from the effects of the severe winter just past. There should be an excellent crop of young stock this spring, as all animals will be in excellent shape by calving time.

Elk.

Elk are in splendid shape in most sections of the park. The severe weather during January, February and the first half of March has left its mark on the herds, and there are still weak elk to be seen. One cow died near the one mile post on the Gardiner road, and one was killed by a Transportation Co. car, but this is all the dead that have been reported this month. In the case of the elk killed by the car, evidence proves conclusively that it was not the fault of the driver. Scoyen reports several elk in a very weakened condition near the four mile post from Norris, and some of these will undoubtedly die before spring. About 20 other elk in the vicinity of Norris were in excellent condition, and have evidently wintered well in the various warm basins at, and around, Norris.

Game and Fish Warden McBride reports a total of 825 elk on the outside of the park boundaries, and east of the Yellowstone River. Forest Rangers report 13 head on Emigrant Peak.

The spring drift to the summer ranges inside the park is now in full swing. Elk in the vicinity of Hellroaring have increased from 400 to 1500 during the month. Elk are scattered thickly along the Yellowstone River watershed from Cache Creek ^{northern} to the park line. They are not banding to any extent, and no exceptionally large herds have been seen during the month. Under these conditions it is rather difficult to get even an estimate of the number in the various sections of the park. Elk in the Gallatin herd show no effects whatever of the winter, and are in splendid condition.

Game Conditions (Cont).

Most of the suffering among the elk at present is due to wood-ticks. This pest is particularly active during the spring months.

The drift of the Northern Herd into the park should be completed by June first, and all members of this herd should be in the park by this time.

Antelope.

There were no recorded deaths among the park antelope during the month of April, from natural or other causes.

A total of 218 were counted near Gardiner on April 15th. This is 30 more than were accounted for last month. It is evident that the loss among these animals is not as heavy as was first supposed. However, the loss among these animals during the past winter is sufficient cause for fear that they may be exterminated within the next few years if some special efforts are not made for their protection.

These animals have also started to drift to their summer ranges. They have been observed at Hellroaring and there is a bunch of 11 reported in the vicinity of the Slough Creek Mailbox. Several small bands still remain in the vicinity of Gardiner.

Deer:

Deer are apparently increasing greatly in all parts of the park. Unusually large numbers have been noted in the Northern District during the past month.

The pets around headquarters have quit begging around back doors to a great extent, and many have left entirely. About 18 deer wintered among the buildings in headquarters, receiving no food but what was given them by kind-hearted residents and hay fed by rangers.

There has been only one white-tail deer in the vicinity of headquarters during the winter. It appears that this species is gradually dying out, not possessing the hardy constitution of their black-tail brothers.

Game Conditions. (Cont)

Mountain Sheep.

Mountain sheep are evidently thriving in the park. They have been seen in many parts of the northern district. There is also one small band on Mountain Ash Creek in the Bechler River District. They have been seen during the past month on Mt. Everts, Hellroaring, Yellowstone Bridge at Tower Falls, Junction Butte, Specimen Ridge and Mt. Norris. It has not been possible to make a count of these animals as they are so hard to approach.

Bear.

The first bear was seen on the 3rd between Mammoth and Blacktail, by McBride. Several others have been seen in other parts of the park, and there is evidently a number of cubs this year.

Moose.

Thorofare station is the only one reporting moose during the month. A total of 14 were seen in this district. None of these were bulls. One cow moose died near Cabin Creek in March.

Wild Buffalo.

Weather conditions which made it practically impossible to travel during the day made the proposed count of the wild herd out of question. Thirteen head were found in the Pelican Creek country. Winn found 56 in the Lamar country and this makes a total seen during the winter of 69. There is a herd of over 50 ranging on Cache Creek, but these are not considered, as there seems to be some doubt as to whether or not, they are the same ones that Winn saw earlier in the winter. It is the opinion of the majority of the men informed on this matter, that this is an entirely different herd. If this is the case our wild herd contains well over 100 head of buffalo. One dead one was found during the winter.³

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Game Conditions (Cont)

Tame Buffalo Herd.

The main herd of buffalo was turned out on the 24th, and the calves on the 30th. Feeding was discontinued on the latter date. 75 tons were fed during the month, and a total of 586 tons for the winter.

18 calves were born to the main herd the past month. Several were also noticed in a small band now ranging on Hellroaring.

Miscellaneous.

Woodchucks and gophers, or ground squirrels, are now numerous in the lower altitudes.

Jack-rabbits have turned gray during the month.

Robins, Bluebirds, Meadowlarks, and Red-shafted Flicker are some of the summer birds that have been noticed during the month.

Work Completed.

Bridge at Hellroaring.

During the month a bridge was built across Hellroaring Creek above the station. There has been a bridge here for some time, but it was in such poor shape that it was necessary to completely rebuild it. Trischman and Bauman did all the work necessary in the construction of the bridge. It will be used during the high water in the spring when it is dangerous to cross by any other means.

Canyon Gaging Station.

During the month the gaging station on the Yellowstone River at the Canyon was placed in commission. Scoyen made a trip from Mammoth to the Canyon for this purpose. Records show that the river is about .01 ft. higher than it was last year. Winterkeeper Wilson has agreed to take care of the gage during the spring months.

Work Completed (Cont)

Sale of Hides.

During the month 31 coyote hides were sold and brought a total of \$155.00. As there were eight scrap hides in the lot that were practically worthless, it is evident that these were sold for a very good price. Mr. C.A. Hamilton bought the hides.

Miscellaneous:Predatory Animals.

Only one coyote was reported killed by rangers during the past month. Park Ranger Anderson cleaned up a den of 1 female and 10 wolf pups during the month. He is still operating in the country where wolves are known to den, and predict that he will get several more dens during the spring.

To date there has been a total of about 175 coyotes and 13 wolves accounted for during the winter. It is not possible to get the exact number of coyotes, as many were known to have taken poison and their carcasses were never found. Anderson was sick during the time that coyotes were taking the poison readily, and was not able to trace them down. Rangers throughout the park have been taking a very active interest in the hunting of these animals since they have been allowed to keep the hides, and have accounted for a large number. I think that this winter proves that giving the men an opportunity to keep these hides, does not result in neglect of regular patrol work.

Feeding.

Feeding of game in all parts of the park was discontinued during the month, and about three weeks to a month later than last year. Feeding stopped at Yancey's on the 27th and at the Buffalo Ranch on the 30th. The main herd of buffalo ^{was} ~~were~~ turned out on the 24th and the calves on the 30th.

A total of 75 tons were fed at the Buffalo Ranch in April as compared to 125 in March. A total of 586 tons were fed during the entire winter.

At Yancey's about 15 tons were fed. There is about 20 tons of hay left at Yanceys, which makes a total fed there of 130 tons for the winter. This should be divided in the ratio of about on third to elk, and two thirds to Park Service and Ranger horses.

Miscellaneous (Cont)

The following table shows the record of hay fed last winter, and the amount of hay on hand at these places at present.

Place	On hand	Fed	Left this spring.
Buffalo Ranch.	701	586	115
Slough Creek	510	495	15
Gardiner	148.2	60.2	88
Yanceys	<u>150</u>	<u>130</u>	<u>20</u>
TOTALS	1509.2	1271.2	238

TOTAL hay fed during winter 1271.2 Tons.

Ranger Quarters at Mammoth.

During the month the building Southeast of the Community House was made into quarters for permanent rangers. A hot water heater was installed in the bath room, all floors and two rooms were painted and the building thoroughly cleaned. The great majority of the work was done by the rangers themselves, the only other labor being employed was a plumber for two days and a painter for a day and half.

These quarters fill a long felt need at Mammoth. It has always been a matter of complaint that men coming from the park have had no suitable accommodations when they arrived at Headquarters, but these quarters will eliminate all such complaints. It is not intended that this building will be used by temporary rangers, but will be for permanent rangers only.

Park Travel:

A total of 48 people entered the park by the Gardiner entrance. This does not include persons entering the park to work for the various departments.

One of the features of the months travel was the ski trip to the Upper Basin by Mr. Carl Soyland and Frantz Johansen of Norway. Mr. Soyland is a Norwegian newspaper writer and is making a trip around the world. He writes travel letters for some of the largest newspapers in Norway as well as some of the larger Norwegian papers in this country. He was tremendously impressed with the park, and will make his winter trip the subject of feature articles in the papers mentioned. The park will receive a great deal of publicity through Mr. Soylands visit, both in this country and abroad. They were given every assistance by this department to make their trip a complete success.

Miscellaneous. (Cont)

Mr. Johansen is a Norwegian sailor, and was born and raised above the Arctic Circle. He gave an exhibition of his exceptional use of skis while here.

Both these men were thoroughly familiar with conditions of winter travel and it was not necessary to send a ranger escort.

Flag at Halfstaff.

Under authority from the Director of National Park Service, flags were half masted in all parts of the park, from April 6th to 16th inclusive, in honor of Howard Eaton who died on April 6th.

Snow at Stations.

The following is the recorded depth of snow at the various stations in the park on the last of the month.

Station	March 31st	April 30th	Decrease.
Bechler River	76"	45"	31"
Snake River	64	40	24
Canyon	56	36	20
Gardiner	0	0	0
Crevice	24	--	--
Soda Butte	27	6	21
Buffalo Ranch	25	Drifts	25
Tower Falls	24	"	24
Norris	--	20	--
Sylvan Pass	40	18	22
Gallatin	23	16 on 24th	7
Riverside	40	22	18
Upper Yellowstone	--	36	--

Plans for the Month of May.

Plans for the month include intensive patrols for the care of roads as mentioned in Circular #3, 1922, commencement of trail construction work, and general policing up around stations.

It is intended to build a road from the main highway to Fish Lake near Soda Butte. This will be about 1/2 mile long, and will be used in connection with work of the Bureau

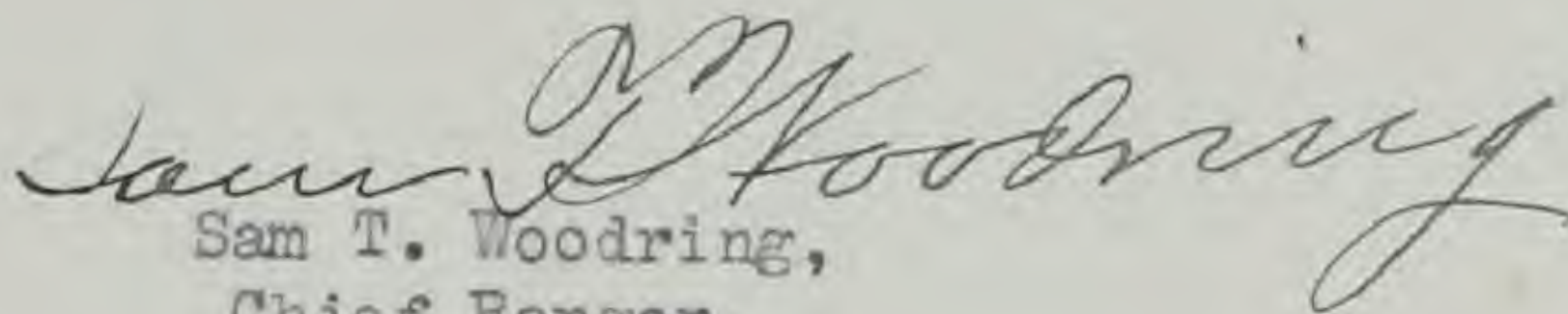
#11

Plans for May(Cont)

of fisheries in collecting spawn from Fish Lake.

As soon the snow goes off work will be commenced on the new Soda Butte Station. It is intended to have rangers do the majority of the work connected with the construction of this building.

Respectfully submitted,


Sam T. Woodring,
Chief Ranger.